

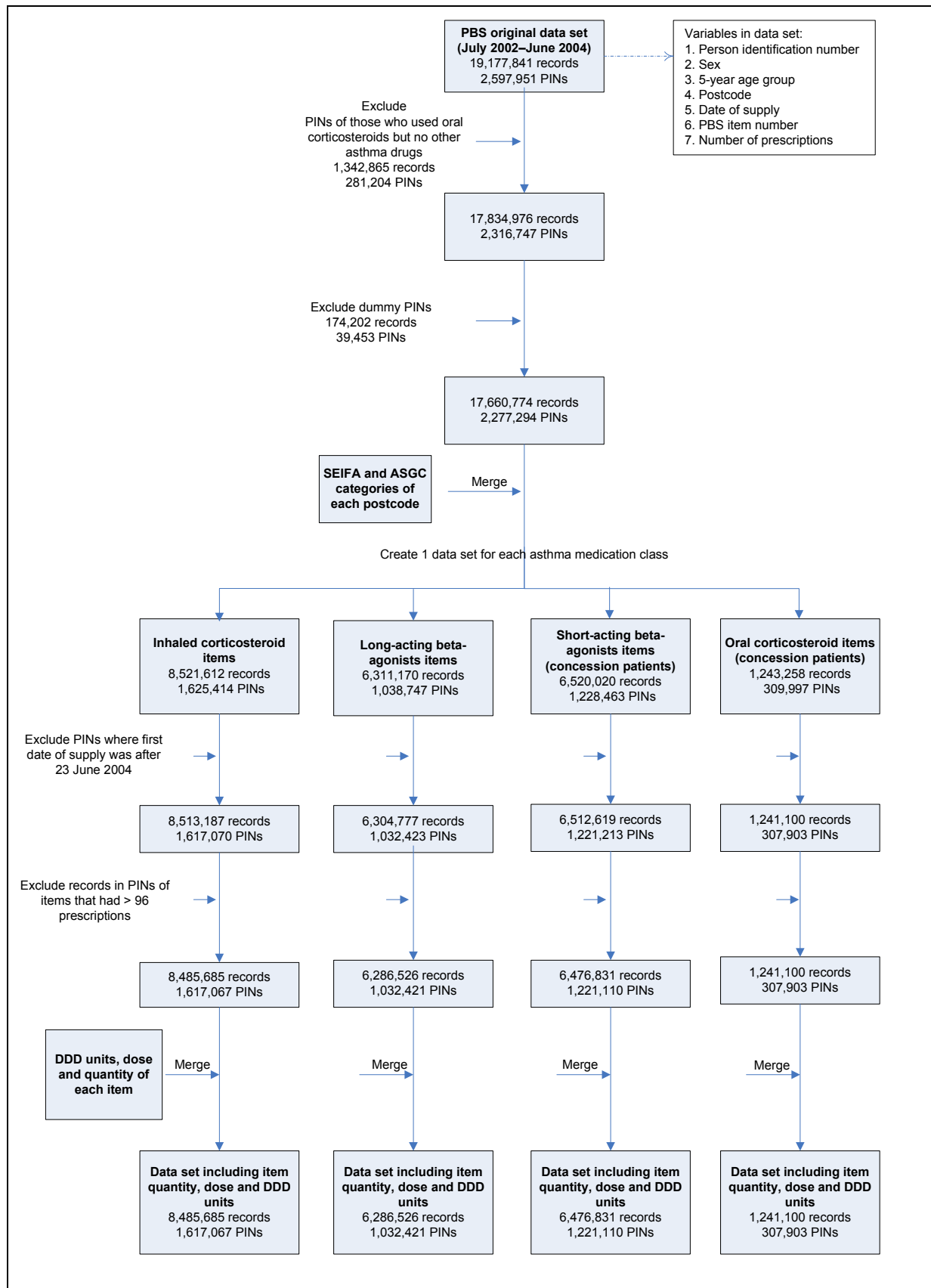
# Appendix 1: PBS items included in the asthma medications data set

Medication included	ATC Code	PBS item code	Proprietary name	Strength of each dose	Quantity of doses	Defined daily dose unit
<b>Short-acting beta agonists</b>						
Salbutamol	R03AC02	1099W	Ventolin rotacaps	200 µg	200	800 µg
		2000G	Asmol, Salbutamol	2.5 mg	60	10 mg
		2001H	Asmol, Salbutamol	5.0 mg	60	10 mg
		2003K	Ventolin	5.0 mg	60	10 mg
		8288F	Asmol CFC- free, Epaq, Airomir, Ventolin CFC-free	100 µg	400	800 µg
		8354Q	Airomir autohaler	100 µg	400	800 µg
Terbutaline sulphate	R03AC03	1243K	Bricanyl	10 mg/mL	50	20 mg
		1251W	Bricanyl respules	5 mg/2 mL	30	20 mg
		1252X	Bricanyl turbuhaler	500 µg	200	2000 µg
<b>Long-acting beta agonists</b>						
Salmeterol	R03AC12	3027H	Serevent	25 µg	120	100 µg
		8141L	Serevent accuhaler	50 µg	60	100 µg
Eformoterol	R03AC13	8136F	Foradile	12 µg	60	24 µg
		8239P	Oxis turbuhaler	6 µg	60	24 µg
		8240Q	Oxis turbuhaler	12 µg	60	24 µg
<b>Inhaled corticosteroids</b>						
Beclomethasone Dipropionate	R03BA01	1650W	Becotide	50 µg	200	800 µg
		1651X	Becotide 100	100 µg	200	800 µg
		8406K	Qvar 50	50 µg	200	800 µg
		8407L	Qvar 100	100 µg	200	800 µg
		8408M	Qvar 50 autohaler	50 µg	200	800 µg
		8409N	Qvar 100 autohaler	100 µg	200	800 µg
Budesonide	R03BA02	2065Q	Pulmicort respules	0.5 mg/2 ml	15	1500 µg
		2066R	Pulmicort respules	1 mg/2 ml	15	1500 µg
		2070Y	Pulmicort turbuhaler	100 µg	200	800 µg
		2071B	Pulmicort turbuhaler	200 µg	200	800 µg
		2072C	Pulmicort turbuhaler	400 µg	200	800 µg

(continued)

Medication included	ATC Code	PBS item code	Proprietary name	Strength of each dose	Quantity of doses	Defined daily dose unit
Fluticasone	R03BA05	8147T	Flixotide jnr accuhaler	100 µg	60	600 µg
		8148W	Flixotide accuhaler	250 µg	60	600 µg
		8149X	Flixotide accuhaler	500 µg	60	600 µg
		8345F	Flixotide	125 µg	120	600 µg
		8346G	Flixotide	250 µg	120	600 µg
		8516F	Flixotide jnr	50 µg	120	600 µg
<b>Long-acting beta agonists combined with inhaled corticosteroids</b>						
Salmeterol and Fluticasone	R03AK06	8430Q	Seretide accuhaler 100/50	Salmeterol = 50 µg Fluticasone = 100 µg	60	100 µg 600 µg
		8431R	Seretide accuhaler 250/50	Salmeterol = 50 µg Fluticasone = 250 µg	60	100 µg 600 µg
		8432T	Seretide accuhaler 500/50	Salmeterol = 50 µg Fluticasone = 500 µg	60	100 µg 600 µg
		8517G	Seretide MDI 50/25	Salmeterol = 25 µg Fluticasone = 50 µg	120	100 µg 600 µg
		8518H	Seretide MDI 125/25	Salmeterol = 25 µg Fluticasone = 125 µg	120	100 µg 600 µg
		8519J	Seretide MDI 250/25	Salmeterol = 25 µg Fluticasone = 250 µg	120	100 µg 600 µg
Budesonide with Eformoterol fumarate dihydrate	R03AK07	8625Y	Symbicort turbuhaler 200/6	Budesonide = 200 µg Eformoterol = 6 µg	120	800 µg 24 µg
		8750M	Symbicort turbuhaler 400/12	Budesonide = 400 µg Eformoterol = 12 µg	120	800 µg 24 µg
<b>Oral corticosteroids</b>						
Prednisolone	H02AB06	1916W	Panafcortelone, Solone	25 mg	30	10 mg
		1917X	Panafcortelone, Solone	5 mg	60	10 mg
		3152X	Predsolone, Panafcortelone	1 mg	100	10 mg
Prednisone	H02AB07	1934T	Predsone, Panafcort	1 mg	100	10 mg
		1935W	Panafcort, Sone	5 mg	60	10 mg
		1936X	Panafcort, Sone	25 mg	30	10 mg

# Appendix 2: PBS data processing



# Appendix 3: Denominator populations

Demographic characteristics	2001 general population	Number of government concession card holders <sup>(a)</sup>
<i>Age group (years)</i>		
0 to 4	1,277,949	n.a.
5 to 14	2,708,978	n.a.
15 to 34	5,548,595	1,288,888
35 to 64	7,532,644	1,860,612
65 and over	2,461,108	2,058,228
<i>Sex</i>		
Male	9,691,946	2,214,734
Female	9,837,328	2,992,994
<i>Socioeconomic status</i>		
SEIFA 1 (most disadvantaged)	3,768,031	1,444,427
SEIFA 2	2,888,603	1,200,375
SEIFA 3	3,431,135	1,006,303
SEIFA 4	4,419,244	952,791
SEIFA 5 (most advantaged)	4,213,282	602,226
<i>Remoteness category (ASGC)</i>		
Major cities	12,869,792	3,218,772
Inner regional	4,023,030	1,288,709
Outer regional	2,050,574	700,248 <sup>(b)</sup>
Remote/ very remote	566,349	
<i>People with asthma or COPD</i>		
Age 15 to 34 years	853,826	248,452
Age 15 years and over	2,052,121	841,661
<b>All persons</b>	<b>19,529,274</b>	<b>5,207,729</b>

(a) Source: ABS, National Health Survey CURF, 2001, age 15 years and over.

(b) Combined *Outer regional/Remote/Very remote* categories.

# Glossary

Asthma medication	<p>A drug that is commonly used to treat asthma. In this study, asthma medications were defined as all medications classed as:</p> <ol style="list-style-type: none"><li>1. inhaled corticosteroids</li><li>2. long-acting beta agonists</li><li>3. short-acting beta agonists</li><li>4. oral corticosteroids.</li></ol> <p>Note that all of these medication classes are also used to treat other diseases and conditions.</p>
Anatomical Therapeutic Chemical (ATC) classification system	<p>A widely used system for classifying drugs using unique ATC codes.</p>
Beneficiary	<p>In this report this refers to a person who is dispensed prescription medications that are subsidised by the PBS.</p>
Concessional beneficiary	<p>Individuals who possess a government-issued health card (including repatriation health care cards) that entitles them to additional subsidy from the PBS.</p>
Copayment	<p>The maximum amount paid by an individual for a dispensed medication that is subsidised by the PBS. The PBS pays the balance of the total cost to the pharmacist, if this is more than the copayment amount.</p>
Defined daily doses (DDDs)	<p>The quantity of defined daily dose units. The calculation of DDDs enables the addition of doses across various medications in the same drug class and the comparison between different classes of drug.</p>
Defined daily dose unit (DDD unit)	<p>The assumed average maintenance dose (usually in mg or µg) per day for a drug used for its main indication in adults.</p>
General beneficiary	<p>Individuals who are dispensed medications subsidised by the PBS who are not categorised as concessional beneficiaries.</p>
Inhaled corticosteroids	<p>A class of medications used to prevent asthma symptoms and exacerbations. Recommended for regular use by people with persistent asthma. These medications are inhaled to suppress airway inflammation. Sometimes referred to as 'preventer' medications.</p>
PBS Item	<p>A specified drug at a given strength classified on the PBS by a unique code.</p>
Long-acting beta agonists	<p>A class of long-acting medications that reverse bronchoconstriction and hence help to control asthma symptoms. They are recommended to be taken regularly in combination with inhaled corticosteroids by people</p>

	with moderate to severe persistent asthma and are administered by inhalation. Their use can result in reduced doses of inhaled corticosteroids being required.
Medication class	A categorisation of several drugs or PBS items under a common mechanism of action. Compare with <i>Asthma medication</i> .
Oral corticosteroids	A class of medications which, when used to treat asthma, are used primarily to treat exacerbations of the disease by reducing acute airway inflammation. Administered orally for short periods to regain control of the disease during acute phases.
Patient identification number (PIN)	A numeric variable that anonymously identifies records for the same individual in the PBS data set.
Pharmaceutical Benefits Scheme (PBS)	The PBS is a program administered by the Australian Government that subsidises most prescription drugs dispensed to Australian citizens and residents.
Prescription	A written order from a medical officer for a medication to be dispensed to an individual.
Safety net	A preset threshold of total copayment expenses incurred by the beneficiary in one calendar year. Once a beneficiary has reached this threshold, the copayment reduces for the remainder of the year. The safety net differs for general and concessional beneficiaries.
Short-acting beta agonist	A class of medications that are taken as needed by people with asthma to rapidly reverse bronchoconstriction and hence relieve asthma symptoms. These medications are usually inhaled, either by metered dose inhaler or nebuliser, and are sometimes referred to as 'reliever' medications.

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